

# Preserve the Harvest



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## Zucchini

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### Did you know?

- A serving of zucchini provides 30% of the recommended daily allowance of Vitamin C.
- In Mexico the flower is preferred over the vegetable, and is often cooked in soups or used as a filling for quesadillas.
- Biologically zucchini is considered a fruit – it is a swollen ovary of the female zucchini flower.



### SELECTION AND PREPARATION OF ZUCCHINI

Select small and firm zucchinis, free of blemishes and decay. Their skin should be tender but firm with a glossy appearance. Avoid stale or over-mature squashes with dull surfaces because they usually have enlarged seeds and dry, stringy flesh.

### FREEZING

For freezing, 1¼ pounds of fresh zucchini will equal about 1 pint frozen. One bushel (40 pounds) yields 32 to 40 pints frozen squash.

### Blanching

Blanching is scalding of vegetables in boiling water or steam to slow or stop the action of certain enzymes. Before being picked enzymes cause vegetables to grow and mature. If vegetables are not blanched, or blanching is not long enough, the enzymes will continue to be active during frozen storage. This can cause off-colors, off-flavors and toughening. Blanching time is critical. Under-blanching speeds up the activity of enzymes and is worse than no blanching. Over-blanching causes loss of flavor, color, vitamins and minerals.

### Boiling Water Blanching

Select young tender squash. Wash and cut into 1/2-inch slices. Blanch, cool and drain. Package, seal and freeze.	Blanch 3 minutes
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The easiest way to blanch zucchini is in a large kettle of boiling water. Allow 1 gallon of water per pound of zucchini. Bring the water to boil and lower sliced or cubed zucchini into the water, allowing the water to continue boiling. Cover and start counting the blanching time. To prevent over-blanching it is important to cool zucchini quickly and thoroughly. To cool, drain

zucchini in a strainer, then quickly plunge into a container of ice water. Cool for the same amount of time as blanched. Drain thoroughly and freeze.

### Steam Blanching

<b>Grated Zucchini for Baking</b> -- Steam in small quantities until translucent. Pack in amounts used in recipes, allowing headspace. Put containers in cold water to cool. Seal and freeze. Drain before using in baking.	Blanch in steam 1-2 minutes
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Frozen grated zucchini works well for baking. Steam blanching is suggested for grated zucchini. Grating large, overripe zucchinis is a good way to utilize them.

To steam, use a pan with a tight-fitting lid and a basket that holds the food at least three inches above the bottom of the pan. Use 1 to 2 inches of water in the pan, bring to a boil and leave on high throughout the blanching process.

Place vegetables in the basket in a single layer so that steam reaches all parts quickly. Cover the pan and start counting time as soon as the lid is on.

Cool vegetables quickly and thoroughly to stop the cooking process. To cool, plunge basket immediately into a large quantity of cold water. Cool vegetables for the same amount of time as they are blanched. Drain vegetables thoroughly after cooling.

## CANNING

Recommendations for canning cubed or sliced zucchini (considered a summer squash), have been withdrawn due to uncertainty about the determinations of safe processing times. Squashes are low-acid vegetables and require pressure canning for a known period of time that will destroy bacteria caused by botulism. Science-based documentation for the previous processing times cannot be found, and reports that are available do not support the old process. Due to this, **IT IS NOT RECOMMENDED THAT YOU HOME CAN ZUCCHINI.**

However, there are tested and safe recipes for zucchini-pineapple and pickled bread-and-butter zucchini. The added acid in these recipes help in making them safe.

### Zucchini-Pineapple

4 quarts cubed or shredded zucchini  
 46 ounces canned unsweetened pineapple juice  
 1 ½ cups bottled lemon juice  
 3 cups sugar

**Yield:** About 8 to 9 pints

**Procedure:** Peel zucchini and either cut into 1/2-inch cubes or shred. Mix zucchini with other ingredients in a large saucepan and bring to a boil. Simmer 20 minutes. Fill jars with hot mixture and cooking liquid, leaving 1/2-inch headspace. Adjust lids and process according to the recommendations in the table below.

Recommended process time for Zucchini-Pineapple in a boiling-water canner.				
		Process Time at Altitudes of		
Style of Pack	Jar Size	0 - 1,000 ft	1,001 - 6,000 ft	Above 6,000 ft
Hot	Half-pints or Pints	15 min	20	25
*After the process is complete, turn off the heat and remove the canner lid. Wait five minutes before removing jars.				

## PICKLING

### Pickled Bread-and-Butter Zucchini

16 cups fresh zucchini, sliced  
4 cups onions, thinly sliced  
1/2 cup canning or pickling salt  
4 cups white vinegar (5%)  
2 cups sugar  
4 tbsp mustard seed  
2 tbsp celery seed  
2 tsp ground turmeric  
**Yield:** About 8 to 9 pints

**Procedure:** Cover zucchini and onion slices with 1 inch of water and salt. Let stand 2 hours and drain thoroughly. Combine vinegar, sugar, and spices. Bring to a boil and add zucchini and onions. Simmer 5 minutes and fill jars with mixture and pickling solution, leaving 1/2-inch headspace. Adjust lids and process according to the recommendations in table below:

Recommended process time for Pickled Bread- and Butter- Zucchini in a boiling-water canner.				
		Process Time at Altitudes of		
Style of Pack	Jar Size	0 - 1,000 ft	1,001 - 6,000 ft	Above 6,000 ft
Hot	Pints or Quarts	10 min	15	20

\*After the process is complete, turn off the heat and remove the canner lid. Wait 5 minutes before removing jars.

## DRYING

Choose young, slender zucchini. Wash. Cut into 1/4 inch slices or 1/3 inch slices for chips. Dry at 125°F until brittle. Dried zucchini should be stored in a moisture-proof container in a dark, dry place. It will keep for a year. Possible storage containers to use include jars, tin cans with tight-fitting lids and plastic containers. Containers should be filled as full as possible without crushing.

Use in soups and casseroles. Sprinkle zucchini chips with seasoned salt and serve with dips.

## STORAGE

Only fresh zucchini in prime condition can produce a good quality preserved product.

**Fresh Zucchini:** Best when eaten or preserved shortly after purchase or harvesting. Expected shelf life is 1 week.

**Frozen Zucchini:** Label and date the packages. Properly packaged and frozen, zucchini should maintain high quality for approximately 10 months.

**Canned Pickled or Pineapple Zucchini:** If lids are tightly vacuum sealed after processing, remove the screw bands, wash the lid and jar to remove food residue; then rinse and dry jars.

Label and date the jars and store them in a clean, cool, dark, dry place. For best quality consume within 1-2 years. Jars will lose quality and nutrients over time, but will remain safe to eat providing the vacuum seal is intact.

**Dried Zucchini:** Pack cooled, dried foods in small amounts in glass jars or in moisture and vapor-proof freezer containers, boxes or bags. Store in a cool, dry, dark place.

## NUTRITIONAL INFORMATION

One serving of zucchini (1/2 medium squash) has 20 calories. It provides approximately the following recommended daily allowances: Vitamin A 6%, Vitamin C 30%, Calcium 2%, and Iron 2%.

## RECIPES

### Zucchini Pancakes

1/2 cup flour  
2 cups shredded zucchini  
3/4 tsp salt  
1/3 tsp pepper  
2 separated eggs

In a small bowl mix flour, squash, salt, pepper and egg yolks. In another bowl beat egg whites until stiff but not dry; fold into zucchini mixture. Drop by heaping tablespoons into about 1/4 inch hot oil in skillet and brown on both sides. Serve immediately. Makes about 15 pancakes.

### Crock Pot Creole Zucchini

2 pounds zucchini (4 cups)  
1 small chopped green pepper  
1 small chopped onion  
1 clove minced garlic  
1 tsp salt  
1/4 tsp pepper  
4 peeled and chopped tomatoes  
2 tbsp butter  
2 tbsp parsley

Cut zucchini into 1/4 inch slices. In slow-cooking pot, combine zucchini with green pepper, onion, garlic, salt and pepper. Top with chopped tomatoes and butter. Cover and cook on high two hours or until tender. Sprinkle with chopped parsley. Makes six to seven servings.

### Squash Blossom Frittata

3-4 zucchini blossoms  
1-2 baby squash  
4 eggs  
Dash of milk  
2 green onions  
Asiago cheese  
Chopped parsley and snipped chives (optional)  
Salt and pepper to taste

Pick 3 to 4 blossoms per person and 1 or 2 baby yellow or green summer squash. Rinse blossoms well and drain on paper towels. Beat 4 eggs with a little milk. Add fresh chopped parsley and snipped chives, if desired. Add salt and pepper to taste. In a non-stick pan, sauté a little butter and cook 2 green onion and thinly sliced baby squash just until soft. Then quickly

sauté the blossoms for about 30 seconds and remove from pan. Pour egg mix into pan, sprinkle and arrange the onions, squash and blossoms on top and cook over low to medium heat until almost set. Sprinkle with Asia go cheese and put under the broiler until lightly puffed and browned.

## References

Andress, Elizabeth L., and Judy A. Harrison. 2006. *So Easy to Preserve, 5th Ed.* Cooperative Extension Service, University of Georgia. Athens, Georgia.

*Ball Blue Book. The Complete Guide to Home Canning and Freezing.* 1995. Alltrista Corporation. Muncie, Indiana.

Brennand, Charlotte. 1994. Home Drying of Food. Utah State University Cooperative Extension. Logan, UT. <http://extension.usu.edu/files/publications/publication/FN-330.pdf>

Metzgar, Karma. 2005. Blanch Vegetables Before Freezing. University of Missouri. Columbia, MO. <http://missourifamilies.org/features/foodsafetyarticles/fdsftyfeature12.htm>

Reynolds, Susan. 1993. Pretreating Vegetables. University of Georgia Cooperative Extension Service. Athens, GA.

*The Zucchini Patch.* 2003. Bulletin number B-669R. University of Wyoming Cooperative Extension. Laramie, WY.

Wolford, Ron and Banks, Drusilla. 2006. Watch Your Garden Grow- Summer Squash. University of Illinois Cooperative Extension. Urbana-Champaign.

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